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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Teck Hu

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06/22/2010

Docket Administrator - Room 3D-201E

Alcatel-Lucent USA Inc.

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EXAMINER

CHERY, DADY

ART UNIT

PAPER NUMBER

2461

MAIL DATE

DELIVERY MODE

06/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,128	Applicant(s) HU, TECK	
	Examiner DADY CHERY	Art Unit 2461	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This communication is responsive to the amendment filed on March 29th 2010.

Claims 1 has been amended.

No Claims have been added.

Claims have 2 and 12-15 cancelled.

Claims 1, 3- 11 are pending.

Response to Arguments

Applicant's arguments, see page 5 -9, filed September 14th 2009, with respect to the rejection(s) of claim(s) 1, 3-4, 10 and 11 under 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Meyer et al. (US Application 2004/0148549, hereinafter Meyer); which discloses a method for reducing a probability of a stalling transmission window which considered as stalling condition as the transmitter and a system state parameter at the transmitter (**page 3, [0020] and page 4, [0030]**).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3-4, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torsner et al. (US Patent 7,187,677, hereinafter Torsner) in view of Meyer et al. (US Application 2004/0148549, hereinafter Meyer).

Regarding claim 1, Torsner discloses a *method (Fig. 3, 4 and 5A) of communication in a wireless system (Col. 1, lines 21 -26), the wireless system providing at least one communications path (the arrow between transmitter and*

receiver) between a transmission node(12) and a receiving node (14), the method (Fig. 3, 4 and 5A) comprising:

determining a probability of a stalling condition occurring for at least one data packet in a sequence of data packets transmitted from the transmission node (12) (Col. 3, lines 43 – 45, Determining whether a stall condition exists with respect to receiving a missing data unit is considered as the function described by the instant application and the stall condition is considered as a probability equal to zero or one); the stalling condition probability being determined in relation to state of at least one system parameter (Col. 2, lines 65 – Col.3, lines 12, Col. 3, lines 43- 63, Col. 5, lines 47 – 63 and Col. 6, lines 14 – 24, where the parameters are acknowledgement error NACK , priority of data sent etc.. as described by the instant application) and transmitting a flush command in response to the determined probability of the stalling condition (Col. 3, lines 55 –59, The removing of the missing data from the receiver buffer is considered as transmitting a flush command), the flush command being operative to terminate the stall condition (Col. 6, lines 41- 53, where the data are removed to stop the stall condition).

Torsner discloses the invention is employed between a transmitter and receiver (Col. 8, lines 54 -56). Torsner also discloses this invention provides a mechanism that avoids stall either at the transmitter, the receiver, or both (Col. 3, lines 35 – 50).

Torsner does not explicitly mention that the system parameter state being determinable at the transmitter and a possibility of stall at a transmitter. However, Meyer

teaches a method for reducing a probability of a stalling transmission window which considered as stalling condition as the transmitter and a system state parameter at the transmitter **(page 3, [0020] and page 4, [0030])**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Meyer with the teaching of Torsner for the purpose of avoiding unnecessary multiple transmissions and ensure a low transmission delay **(Page 2, [0011])**.

Regarding claim 3, Torsner discloses the at least one wireless system parameter *comprises a size of the sequence of data packets, a number of repeat request processes, at least one priority for each of the number of repeat request processes, a probability of error over an uplink and a probability of error over a downlink* **(Col. 3, lines 64 – Col. 4, lines 36)**.

Regarding claim 4, Torsner discloses *estimating a wait time, prior to the transmitting of a flush command, in response to the determined probability of the stalling condition* **(Col. 3, lines 51-55)**.

Regarding claim 10, Torsner discloses *the method of transmitting a recommended range for a service time-out condition in response to the determined probability of a stalling condition* **(Col. 3, lines 6 –10)**. **The cancellation of retransmission is considered as a service time-out condition.**

Regarding claim 11, Torsner discloses *the service time-out condition corresponds with at least one of a high-speed downlink packet access service and a*

high-speed uplink packet access service (Fig. 9). Where the core network (160) is considered as the high-speed downlink packet access service and the UMTS network (220) is considered as the high-speed uplink packet access service.

Claims 5- 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torsner in view of Meyer as applied to claim 4 above, and further in view of Watanabe et al. (US Patent 6,285,662, hereinafter Watanabe).

Regarding claim 5, Torsner discloses the *step of estimating a wait time* (Col. 3, lines 51 –52).

Torsner fails to mention *the step comprises determining an average number of time slots for at least a first data packet prior to transmission.*

However, Watanabe teaches a method to determine an average number of time slots prior to transmission a first data packet (**Fig. 1, 56, Col. 13, lines 13 –15 and Col. 14, lines 12 – 14**).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine an average number of time slots prior to transmission a first data packet for the purpose of selecting a size of a contention window for a packet of data system (**Abstract**).

Regarding claim 6, Torsner discloses *the step of comprises:*

queuing at least the first data packet for transmission (Fig. 5A, Col.6, lines 66 – Col.7, lines 26);

determining if a second data packet having a lower sequential designation than the first data packet has stalled (Col. 3, lines 55 –57).

Torsner fails to teach *determining an average number of waiting time slots*. However, Watanabe teaches a method to determine an average number of time slots **(Fig. 1, 56, Col. 13, lines 13 –15).**

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine an average number of time slots for the purpose of selecting a size of a contention window for a packet of data system **(Abstract).**

Regarding claim 7, Torsner discloses *the step of transmitting a flush command comprises: transmitting the first data packet in response to determining the second data packet has stalled (Col. 3, lines 55- 59 and Col. 7, lines 10 – 16).*

Regarding claim 8, Torsner discloses *the step of transmitting the first data packet comprises: determining if the second data packet is designated for a particular memory location (Fig. 5A and 5B, Col.6, lines 66 – Col.7, lines 26).*

Regarding claim 9, Torsner discloses *the particular memory location is at one end of a finite buffer (Fig. 5A).*

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DADY CHERY whose telephone number is (571)270-1207. The examiner can normally be reached on Monday - Thursday 8 am - 4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. VU can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dady Chery/
Examiner, Art Unit 2461

/Huy D Vu/
Supervisory Patent Examiner, Art Unit 2461